## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A thermoelectric apparatus comprising:
  - a Peltier effect heat transfer circuit system including:
  - a plurality of thermoelectric transducers, each of the thermoelectric transducers including a first conductive member and a second conductive member having different Seebeck coefficients, and a joining member joining the first conductive member and the second conductive member;
  - a first coupling member connecting the second <u>a first</u> longitudinal end of the first conductive member of one of the thermoelectric transducers electrically and serially to the second <u>a first</u> longitudinal end of the first conductive member of another of the thermoelectric transducers;
  - a second coupling member connecting the second <u>a first</u> longitudinal end of the second conductive member of one of the thermoelectric transducers electrically and serially to the second <u>a first</u> longitudinal end of the second conductive member of another of the thermoelectric transducers; and
  - a direct-current power supply serially connected to one of the coupling members, wherein:

the first conductive member has a longitudinal length long enough to prevent a thermal effect at a first longitudinal end of the first conductive member and a thermal effect at a second longitudinal end of the first conductive member from canceling each other, and to keep a difference in temperature between the first and second longitudinal ends of the first conductive member;

the second conductive member has a longitudinal length long enough to prevent a thermal effect at a first longitudinal end of the second conductive member and a thermal effect at a second longitudinal end of the second conductive member from canceling each other, and to keep a difference in temperature between the first and second longitudinal ends of the second conductive member;

wherein the joining member joins the first a second longitudinal end of the second conductive member to a second longitudinal end of the first conductive member;

wherein the Peltier effect heat transfer circuit system includes a heat absorption module and a heat generating module, wherein the heat absorption module is disposed away from the heat generating module so as to keep a temperature of the heat <u>absorption</u> absorbing module below a temperature of the heat generating module.

Claims 2-15. (Canceled)